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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,015	06/24/2003	Moon-Shik Kang	YOM-0035	5700
23413	7590	02/08/2006	EXAMINER SHANKAR, VIJAY	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			ART UNIT 2673	PAPER NUMBER
DATE MAILED: 02/08/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/606,015	<b>Applicant(s)</b> KANG ET AL.	
	<b>Examiner</b> VIJAY SHANKAR	<b>Art Unit</b> 2673	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 and 5-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Weng (6,317,347) .

Regarding Claim 1, Weng teaches an apparatus of driving a light source for a display device, the apparatus comprising: an electricity supplying unit supplying electricity to the light source (fig.3; Col.4, lines 13-46; Col.5, lines 50-67); a current sensor (145 in fig.3) detecting a current outputted from the electricity supplying unit (Fig.3, Col.4, line 15-32); and a light controller controlling the electricity supplying unit based on a signal from the current sensor and a dimming control signal from an external device (fig.3,5; Col.4, lines 15-55; Col.6, lines 39-65); the electricity supplying unit

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comprises a transformer (245 in fig.5) including a primary coil (245a) and a secondary coil (245b) and applying a voltage induced in the secondary coil to the light source (see Figs.3-5; Col.4, lines 13-65) and (fig.5; Col.4, lines 47-67; Col.6, lines 5-34); and the current sensor is connected to the secondary coil of the transformer (see Figs.3-5; Col.4, lines 13-65) and senses a current in the secondary coil of the transformer. (figs.3,5-6; Col.4, lines 1-65; Col.6, lines 5-39).

Regarding Claim 2, Weng teaches the apparatus wherein the light controller controls a switching unit in a pulse width modulation manner based on the dimming control signal and the signal from the current sensor (see Figs.3-5; Col.4, lines 5-65).

Regarding Claim 3, Weng teaches the apparatus wherein the light controller determines an overcurrent in the light source based on the signal from the current sensor and turns on/off the switching unit based on the determination of the overcurrent (fig.3-5; Col.4, lines 1-65; Col.6, lines 5-39).

Regarding Claim 5, Weng teaches the apparatus of driving a light source for a display device, the apparatus comprising: an electricity supplying unit supplying electricity to the light source (fig.3; Col.4, lines 13-46; Col.5, lines 50-67); a current sensor (145 in fig.3) detecting a current outputted from the electricity supplying unit (Fig.3, Col.4, line 15-32); and a light controller controlling the electricity supplying unit based on a signal from the current sensor and a dimming control signal from an external device (fig.3,5; Col.4, lines 15-55; Col.6, lines 39-65); the electricity supplying unit comprises a transformer (245 in fig.5) including a primary coil (245a) and a secondary coil (245b) and applying a voltage induced in the secondary coil to the light source (see Figs.3-5; Col.4, lines 13-65) and (fig.5; Col.4, lines 47-67; Col.6, lines 5-34); wherein the electricity supplying unit further comprises: a switching unit switching an input voltage from an external device under the control of the light controller; and an oscillator generating an AC voltage based on the input voltage from the switching unit and supplies the generated AC voltage to the primary coil of the transformer (figs.3,5-6; Col.5, line 42- Col.6, line 39); wherein the current sensor (see Figs.3-5; Col.4, lines 13-65) is connected to the oscillator and senses a current in the oscillator (see Figs.3-5; Col.4, lines 13-65; Fig.6; Col.5, line 42- Col.6, line 39).

Regarding Claim 6, Weng teaches the apparatus wherein the current sensor comprises a capacitor and a diode connected in parallel between the electricity supplying unit and a predetermined voltage and a voltage divider connected to the capacitor and the diode and to the light controller (see Figs.3-5; Col.4, lines 13-65; Fig.6; Col.5, line 42- Col.6, line 39).

Regarding Claim 7, Weng teaches the apparatus wherein light source includes a fluorescent lamp ( 31 in fig.1).

Regarding Claim 8, Weng teaches the apparatus wherein the light controller controls the switching unit in a pulse width modulation manner based on the dimming control signal and the signal from the current sensor. (figs.3; Col.3, lines 16-63; Col.4, lines 1-45).

Regarding Claim 9, Weng teaches the apparatus wherein the light controller determines an overcurrent in the light source on the basis of the signal from the current sensor and turns on/off the switching unit based on the determination of the overcurrent. (figs.3; Col.4, lines 13-32).

Regarding Claim 10, Weng teaches the apparatus wherein the current sensor comprises a capacitor and a diode connected in parallel between the electricity supplying unit and a predetermined voltage and a voltage divider connected to the capacitor and the diode and to and the light controller(figs.1,3; Col.4, lines 1-55; Col.5, lines 5-65).

Regarding Claim 11, Weng teaches the apparatus wherein the light source includes a fluorescent lamp ( 31 in fig.1).

***Response to Arguments***

4. Applicant's arguments filed 11-22-06 have been fully considered but they are not persuasive.

Applicant argues that Weng does not teach the current sensor is connected to the secondary coil of the transformer and senses a current in the secondary coil of the transformer.

However, Weng teaches the current sensor is connected to the secondary coil of the transformer (see Figs.3-5; Col.4, lines 13-65) and senses a current in the secondary coil of the transformer. (figs.3,5-6; Col.4, lines 1-65; Col.6, lines 5-39).

***Conclusion***


5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIJAY SHANKAR whose telephone number is (571) 272-7682. The examiner can normally be reached on M-F 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BIPIN SHALWALA can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



VIJAY SHANKAR  
Primary Examiner  
Art Unit 2673

VS